

WORKSHOP DRAFT

FUGITIVE DUST

Adopted 06-19-79
(Amended 10-19-93, 12-XX-XX)

- 100 PURPOSE:** To reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.
- 101 APPLICABILITY:** The provisions of this rule shall apply to any activity or man-made condition capable of generating fugitive dust.
- 103 EXEMPTIONS:** The provisions of this rule shall not apply to:
- 103.1 Agricultural operations to the extent that the operations are exempted by law from District regulation.
 - 103.2 Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
 - 103.3 Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
 - 103.4 Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
 - 103.5 Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
 - 103.6 Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that no nuisance results from such activity. The provisions of this clause does not exempt the owner of any property from controlling fugitive dust emissions emanating from disturbed surface areas which have been created as a result of the weed abatement actions.
 - 103.7 To unpaved roads, provided such roads:

- 103.7.1 Are less than 50 feet in width at all points along the road; and
- 103.7.2 Are within 25 feet of the property line; and
- 103.7.3 Have a traffic volume less than 20 vehicle-trips per day.
- 103.8 To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigating actions are in conflict with the federal Endangered Species Act.
- 103.9 To non-routine or emergency maintenance of flood control channels and water spreading basins.
- 103.10 The provisions of Section 300 shall not apply to blasting operations that have been permitted by the California Division of Industrial Safety.
- 103.11 The provisions of Section 405 shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles.

200 DEFINITIONS

- 201 ACTIVE OPERATIONS:** Any activity capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, or heavy- and light-duty vehicular movement on disturbed surface areas, including inactive disturbed surface areas, and unpaved roads.
- 202 ANEMOMETERS:** Devices used to measure wind speed and direction in accordance with the performance standards.
- 203 ASBESTOS:** Asbestiforms of the following minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous ummingtonite-grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.
- 204 ASBESTOS AIRBORNE TOXIC CONTROL MEASURE FOR CONSTRUCTION, GRADING, QUARRYING, AND SURFACE MINING OPERATIONS:** A regulation adopted as section 93105, title 17, California Code of Regulations (CCR) by the California Air Resources Board per Health and Safety Code section 39666 which requires the adoption of regulations to reduce emissions of identified airborne toxics to the lowest level achievable.

- 205 BULK MATERIAL:** Sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- 206 CHEMICAL STABILIZERS:** A non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the Environmental Protection Agency, or any applicable law, rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- 207 CONSTRUCTION/DEMOLITION ACTIVITIES:** Any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- 208 CONTRACTOR:** Any person who has a contractual arrangement to conduct an active operation for another person.
- 209 DISTURBED SURFACE AREA:** A portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
- 209.1** Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - 209.2** Been paved or otherwise covered by a permanent structure; or
 - 209.3** Sustained a vegetative ground cover over at least 95 percent of an area for a period of at least 6 months.
- 210 DUST SUPPRESSANTS:** Water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- 211 EARTH-MOVING ACTIVITIES:** Include, but are not limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, or soil mulching.

- 212 FUGITIVE DUST:** Any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of man.
- 213 GEOGRAPHIC ULTAMAFIC ROCK UNIT:** A geographic area that is designated as an ultramafic rock unit or ultrabasic rock unit on maps identified in the
- 214 INACTIVE DISTURBED SURFACE AREA:** Any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of seven (7) consecutive days.
- 215 NATURALLY-OCCURRING ASBESTOS:** Asbestos that has not been processed in an asbestos mill.
- 216 NON-ROUTINE:** Any non-periodic active operation that occurs no more than three times per year, lasts less than 30 cumulative days per year, and is scheduled less than 30 days in advance.
- 217 OPEN STORAGE PILE:** Any accumulation of bulk material with 5 percent or greater silt content which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet. Silt content level is assumed to be 5 percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136 or other equivalent method approved in writing by the Executive Officer and the California Air Resources Board, that the silt content is less than 5 percent. The results of ASTM Method C-136 or equivalent method are valid for 60 days from the date the sample was taken.
- 218 PARTICULATE MATTER:** Any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- 219 PAVED ROAD:** An improved street, highway, alley, public way, or easement that is covered by typical roadway materials excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- 220 PM₁₀:** Is particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- 221 PROPERTY LINE:** The boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use

or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

- 222 ROAD CONSTRUCTION AND MAINTENANCE:** Activities undertaken to build roads, highways, railroads, bridges, culverts, drains and other works incidental to road or highway construction, and maintenance activities that involve grading or excavation. Road Construction and Maintenance does not include the construction of rest stops, maintenance buildings, or parking lots.
- 223 SERPENTINE:** Any form of the following hydrous magnesium silicate minerals: antigorite, lizardite, and chrysotile.
- 224 SILT:** Any aggregate material with a particle size less than 74 micrometers in diameter that passes through a No. 200 Sieve.
- 225 SIMULTANEOUS SAMPLING:** The operation of two PM10 samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- 226 STABILIZED SURFACE** means:
- 226.1** Any disturbed surface area or open storage pile which is resistant to wind-driven fugitive dust;
- 226.2** Any unpaved road surface in which any fugitive dust plume emanating from vehicular traffic does not exceed 20 percent opacity.
- 227 ULTRAMAFIC ROCK:** An igneous rock composed of 90 percent or greater of one or a combination of the following iron/magnesium-rich, dark-colored silicate minerals: olivine, pyroxene, or more rarely amphibole. For the purposes of this section, "ultramafic rock" includes the following rock types: dunite, pyroxenite, and peridotite; and their metamorphic derivatives.
- 228 UNPAVED ROADS:** Any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by one of the following: concrete, asphaltic concrete, recycled asphalt, or asphalt. Public unpaved roads are any unpaved roadway owned by Federal, State, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
- 229 VISIBLE EMISSIONS:** Visible emissions" means any particulate matter that is visually detectable without the aid of instruments other than corrective lenses.

- 230 VISIBLE ROADWAY DUST:** Any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper, or a wet sweeper under normal operating conditions.
- 231 WIND-DRIVEN FUGITIVE DUST:** Visible emissions from any surface area that is generated by wind action alone.
- 232 WIND GUST:** The maximum instantaneous wind speed as measured by an anemometer.

300 STANDARDS

- 301 VISIBLE EMISSIONS NOT ALLOWED BEYOND PROPERTY LINE:** A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area, such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source.
- 302 VISIBLE EMISSIONS FROM ACTIVE OPERATIONS:** In addition to the requirements of Rule 202, VISIBLE EMISSIONS, a person shall not cause or allow fugitive dust generated by active operations, open storage pile, or disturbed surface area, such that the fugitive dust is of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart (i.e. 40% opacity), as published by the United States Bureau of Mines.
- 303 CONCENTRATION LIMIT:** A person shall not cause or allow PM10 levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent method for PM10 monitoring. If sampling is conducted, samplers shall be:
- 303.1** Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA-published documents for EPA-approved equivalent method(s) for PM10.
- 303.2** Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

400 ADMINISTRATIVE REQUIREMENTS:

401 ROAD CONSTRUCTION AND MAINTENANCE OPERATIONS: A person shall conducting any road construction or maintenance activities shall employ all of the following dust control measures:

- 401.1** Unpaved areas subject to vehicle traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos; and
- 401.2** The speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries; and
- 401.3** Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered; and
- 401.4** Prior to any ground disturbance, sufficient water must be applied to the area to be disturbed to prevent visible emissions from crossing the property line; and
- 401.5** Activities must be conducted so that no track-out from any road construction is visible on any paved roadway open to the public.

402 CONSTRUCTION AND GRADING OPERATIONS:

402.1 MINIMUM CONTROL REQUIREMENTS: The following dust mitigation measures are initiated at the start and maintained throughout the duration of the construction or grading activity:

- 402.1.1** Construction vehicle speed at the work site must be limited to fifteen (15) miles per hour or less; and
- 402.1.2** Prior to any ground disturbance, sufficient water must be applied to the area to be disturbed to prevent visible emissions from crossing the property line; and
- 402.1.3** Areas to be graded or excavated must be kept adequately wetted to prevent visible emissions from crossing the property line; and
- 402.1.4** Storage piles must be kept adequately wetted, treated with a chemical dust suppressant, or covered when

material is not being added to or removed from the pile; and

402.1.5 Equipment must be washed down before moving from the property onto a paved public road; and

402.1.6 Visible track-out on the paved public road must be cleaned using wet sweeping or a HEPA filter equipped vacuum device within twenty-four (24) hours.

403 REQUIREMENTS FOR NATURALLY OCCURRING ASBESTOS AREAS: No person shall engage in any road construction or maintenance operations or construction or grading operations where the area to be disturbed is greater than one (1.0) acre without complying with the requirements of the State's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations where:

403.1 In any portion of the area to be disturbed is located in a geographic ultramafic rock unit; or

403.2 In any portion of the area to be disturbed has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the person, owner/operator, or the Air Pollution Control Officer (APCO).

403.3 Naturally-occurring asbestos, serpentine, or ultramafic rock is discovered by the owner/operator, a registered geologist, or the APCO in the area to be disturbed after the start of any construction or grading operation.

402 COMPLIANCE WITH STANDARDS: A person conducting active operations, or who is responsible for man-made condition of open storage piles, or disturbed surface areas, including inactive disturbed surface areas, within the boundaries of Placer County shall take all measures necessary to comply with the Standards of Section 300.

404 REASONABLE PRECAUTIONS: A person shall not allow or permit fugitive dust emissions, without first implementing good housekeeping and or work practices that will reduce and control emissions to the atmosphere.

405 TRACK-OUT ON TO PAVED PUBLIC ROADWAYS: Visible roadway dust as a result operations and the track-out of bulk material onto public paved roadways shall be prevented or removed:

405.1 Prevent the track-out of bulk material onto public paved roadways as a result of operations and remove within one hour such material

anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and

405.2 Remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

405.3 Track-out in identified naturally-occurring asbestos, serpentine, or ultramafic rock areas shall in addition comply with the State's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations.

406 WIND-DRIVEN FUGITIVE DUST CONTROL:

406.1 A person shall take the action or actions as may be necessary to minimize wind-driven dust from active operations, up to and including the termination of active operations.

406.2 A person shall take the action or actions as may be necessary to minimize wind-driven dust from inactive disturbed surface areas.

500 MONITORING AND RECORDKEEPING: (None)